

Part 2. Ecological Debt and Multilateral Environmental Agreements (MEAs)

The core research (part 1) examined the state of affairs on ecological debt and tried to formulate methods for strengthening the concept, such as elaborating a working definition for ecological debt, formulating a consistent methodology and developing a supporting scientific frame of reference. But even if it possible to strengthen the concept of ecological debt, that does not mean it will become part international negotiations or international law. This part of the report consists of three main sections. The first section examines the current place of the concept of ecological debt in international environmental law. It mainly focuses on the links that were found with the concept. Section 2 gives a brief overview of the difficulties that are faced in actually introducing this concept. Finally, section 3 tries to provide certain points of departure for solutions in this regard.

2.1. The status of ecological debt in international environmental law

2.1.1. Existing MEAs¹

2.1.1.1. *Direct reference?*

A thorough examination of the most important contemporary MEAs made clear that current international environmental treaties are simply unfamiliar with the *term* ‘ecological debt’: no direct reference was found.

2.1.1.2. *Links to the concept*

But this does not mean that the *concept* of ecological debt should be considered as something entirely new that has nothing to do with environmental conventions. Certain environmental law principles address issues that are part of the concept of ecological debt and some of the ideas that frame the concept are, to some extent, already translated in the wording of existing MEAs. We can actually find principles or mechanisms that could provide a possible solution for some of the problems that are also brought to the fore by the concept of ecological debt. In other words, *links* can be found.

¹ For this modular research, the examined MEAs are: the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol to the UNFCCC, the Convention on Biological Diversity (CBD), The Cartagena Protocol to the CBD, the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD), The Vienna Convention for the Protection of the Ozone Layer (Vienna Convention), the Montreal Protocol to the Vienna Convention, the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Treaty), and the International Treaty on Plant Genetic Resources (ITPGR). This list is the result of choices that had to be made. We chose those environmental treaties that looked most promising concerning the concept of ecological debt, but one should know that today there are approximately over 900 treaties containing provisions regarding the environment.

The principle of common but differentiated responsibilities

This principle, which was first introduced *as such* in the Rio Declaration of 1992 (Principle 7), implies that although every state has the responsibility to protect the earth against global environmental threats, developed countries have a greater responsibility because of their larger contribution to environmental problems worldwide and should thus take more far-reaching measures. The principle generates different commitments for states to protect the environment.²

The roots of Principle 7 of the Rio Declaration actually go back to Principle 11 of the Stockholm Declaration on the Human Environment (1972)³ that introduced a double standard for environmental policies: one stricter for developed states, the other less strict for developing countries in order to safeguard their trade position and development in general.

In other words, when it comes to protecting the global environment, according to the principle of common but differentiated responsibilities, developed and developing countries are viewed as different players with a different role to play.

The link with ecological debt is twofold: first of all, this principle recognizes the historical responsibility of industrialised countries regarding worldwide environmental problems and, secondly, this recognition is used as a basis for developed countries to take more far-reaching measures than developing countries.

Today, this principle can explicitly be found in art. 3 (1) and art. 4 (1) of the UNFCCC and art. 10 of the Kyoto Protocol. Other passages in MEAs use different wording, but express the very same view. Examples are the Preamble to the CBD, art. 13 (4), c) and d) of the Kyoto Protocol, art. 5, 6, 16, 17 (1) of the UNCCD, the Preamble to the Montreal Protocol and art. 5 of that Protocol. In the latter, developing countries were entitled to delay their commitments to reduce production and consumption of substances that deplete the ozone layer for ten years. In the UNFCCC, more particular in the Kyoto Protocol, industrialized countries accepted the obligation to reduce their greenhouse gas (GHG) emissions, while developing countries only have to initiate certain policies to ‘address their emissions’ without any duty concerning the outcome of those policies.⁴ Consequently, in the Kyoto Protocol, Northern countries have a clear legally defined obligation to reduce GHG due to the fact that they are responsible for the majority of GHG emissions worldwide.

Some argue that although the empirical evidence at this time is limited to only a few articles, one could conclude there is a growing state practice of acceptance of a *general principle of differentiation* as a general principle of *justice* in international environmental law.⁵

² SANDS, P., “International Law in the Field of Sustainable Development: Emerging Legal Principles”, in LANG, W. (ed.), *Sustainable Development and International Law*, London/Dordrecht, Graham & Trotman, 1995, 63-64; SANDS, P., “Environmental Protection in the Twenty-first Century: Sustainable Development and International Law”, in VIG, N.J. & AXELROD, R.S. (ed.), *The Global Environment, Institutions, Law and Policy*, London, Earthscan, 1999, 129.

³ Hereafter ‘Stockholm Declaration’. Reprinted in 11 I.L.M. 1416 (1972).

⁴ BIERMANN, F., “Justice in the Greenhouse: Perspectives from International Law”, in TÓTH, F. (ed.), *Fair weather: equity concerns in climate change*, London, Earthscan, 1999, 164.

⁵ *Ibid.*, 165.

However, it should be noted here that the major difference between this principle and e.g. the polluter-pays principle (infra) is that the latter has existed for a longer time and as such has already been recognised as a general principle of international environmental law, both in legal doctrine and in the preambles of a number of treaties.⁶ The principle of common but differentiated responsibilities on the other hand is more recent and not the subject of general application: it is not recognised as such outside of the context of the treaties in which it is incorporated. In other words, it certainly is a principle, but for the moment not a principle of international environmental law with a general application. In the context of MEAs in which it is incorporated as a treaty obligation, it obviously has to be applied. For example, this principle, which is prominently part of the UNFCCC and the Kyoto Protocol and became a treaty obligation, has to be applied in any future climate change policy.

Numerous other passages in MEAs refer at least to the special status of developing countries, thereby again differentiating between the latter and developed countries. For example: art. 4 (7) and (8) of the UNFCCC, art. 2 (3) and 3 (14) of the Kyoto Protocol, art. 8, 9, 12, 16 to 19, 20 (2) to (7), 21 (1) of the CBD, the Preamble to the Cartagena Protocol, art. 20 (1) b, 22 (1) and (2), 28 (1), (3), (4) and (6) of the Cartagena Protocol, the Preamble to the UNCCD, art. 3 (d), 4 (2) b and h, 4 (3), 7, 13 (2), 17 (1) d etc. of the UNCCD, the Preamble to the Vienna Convention, art. 4 (2), Annex I (3) of the Vienna Convention, art. 9 and 10 of the Montreal Protocol.

The principle of intra- and intergenerational equity

Principle 3 of the Rio Declaration – which has its roots in Principle 2 of the Stockholm Declaration – points out the importance of making sure that development also encompasses protecting the environment for present as well as for future generations. Today, the unequal distribution of wealth between developed and developing countries lays a heavy burden on the realisation of sustainable development on a global scale. Since it addresses problems caused by *unsustainable* production and consumption patterns, the concept of ecological debt is obviously also linked to this principle of intra- and intergenerational equity. The ever-growing ecological debt poses serious problems for the future. Regarding MEAs, references to protecting the environment for future generations can be found in the Preamble of the UNFCCC, art. 3(1) of the UNFCCC, the Preamble to the CBD, art. 2 (definition of ‘sustainable use’) of the CBD, the Preamble to the UNCCD and art. 4 of the World Heritage Treaty.

The polluter-pays principle

This principle was first defined in 1972 in a recommendation of the Organisation for Economic Co-operation and Development (OECD) as: “*the polluter should bear the expenses of carrying out pollution prevention and control measures decided by public authorities to ensure that the environment is in an acceptable state*”.⁷ Nowadays it has a broad meaning. Those who are responsible for causing or having caused pollution should pay for the cost of removing this pollution, or should provide compensation to those who have been harmed by it. It is reiterated, amongst other texts, in European Law⁸, in numerous international⁹ and

⁶ See footnote 12.

⁷ OECD Recommendation on Guiding Principles concerning Environmental Policies, May 26 1972, 11 *ILM* 1172 (1972).

⁸ E.g. art. 174 (2) and art. 175 (5) EC Treaty, art. 10 Council Directive 31/1999 on the landfill of waste etc.

regional¹⁰ environmental treaties, in the Rio Declaration (Principle 16) and in the policy of the United Nations Environment Programme (UNEP).¹¹

Except maybe in relation to states in the EC, the OECD and the United Nations Economic Commission for Europe (UNECE), it is questionable whether the polluter-pays principle can be considered as a generally applicable rule of customary international law, especially given the less specific language of Principle 16 of the Rio Declaration - compared to the wording of the principle on a regional level. However, the status of the principle as a *general principle of international environmental law* is undisputed.¹²

The principle is closely linked to the recent recognition in several instruments by industrialised nations of the '*responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment*'¹³, as well as to the related financial and other consequences of such recognition.¹⁴ Also, during the negotiations of the UNFCCC it was proposed by some that the principle might serve as a proper legal framework to answer questions of liability and compensation.¹⁵

The concrete meaning of the polluter-pays principle actually lies in its allocation of *economic obligations* in relation to activities that are detrimental to the environment, for instance regarding liability.¹⁶ The growing attention that is being given to the principle is indeed caused by an increased interest in the relation between protection of the environment and economic development and also by recent measures to apply economic instruments in environmental protection law and policy.¹⁷ It is true that the principle especially targets *private polluters* and that it has to be put into operation by States through their internal or national legislation. The polluter-pays principle in principle 16 of the Rio Declaration is mainly focused on pollution within the boundary of one State. Whether a State can be considered as a participative polluter to another State or inhabitants of another State under the polluter-pays principle, is unclear.¹⁸ Finally, *prevention* is not an inherent aspect of the

⁹ Art. 3 (2) 1996 Protocol to the 1972 London Convention, Preamble International Convention on Oil Pollution Preparedness, Response and Co-operation (1990), Art. 19 (1) Energy Charter Treaty (1994).

¹⁰ Art. 2 (5) (b) UNECE Transboundary Waters Convention (1992), Preamble UNECE Convention on the Transboundary Effects Of Industrial Accidents (1992), art. 2 (2) (b) OSPAR Convention (1992), art. 3 (4) Baltic Sea Convention (1992), art. 2 (4) Danube Convention (1994), Preamble Lugano Convention on civil liability for damage resulting from activities dangerous to the environment (1993), art. 10 (d) ASEAN Convention (1985) etc.

¹¹ See : "*Polluter-pays principle : the potential polluter pays for the avoidance of pollution and the polluter pays for the clean-up cost of any pollution*". UNEP/CHW.2/1/3, 12 december 1991, 9.

¹² See: Preamble International Convention on Oil Pollution Preparedness, Response and Co-operation (1990), Preamble UNECE Convention on the Transboundary Effects Of Industrial Accidents (1992).

¹³ Principle 7, Rio Declaration (supra).

¹⁴ SANDS, P., *Principles of International Environmental Law*, Cambridge University Press, Cambridge, 2003, 280.

¹⁵ See Report of the INC, 1st session 4-14 February 1991, UN Doc. A/AC.237/6, 6 f. and UN Doc. A/AC.237/Misc.1/Add.3 at 24, submission by Vanuatu on behalf of AOSIS.

¹⁶ SANDS, P., *Principles of International Environmental Law*, Cambridge University Press, Cambridge, 2003, 280.

¹⁷ *Ibid.*, 284.

¹⁸ MAES, F., Internationaal Milieurecht, Academic Course 2001-2002, part 1, 86 and references there: BOYLE, A., "Making the Polluter Pay? Alternatives to State Responsibility in the Allocation of Transboundary Environmental Costs", in FRANCONI, F. & SCOVAZZI, T. (eds.), *International Responsibility for Environmental Harm*, London, Graham & Trotman, 1991, 363-379.

principle, but the latter does not exclude preventive consequences: preventive measures can be borne by the polluter and therefore the principle has a potentially preventive character.

The Adaptation Fund under the Kyoto Protocol

The Kyoto Protocol aims at reducing the GHG emissions of developed countries, which could be viewed as a preventive measure towards climate change. But because nowadays there is a growing consensus that climate change at this point in time is somehow inevitable and that global effects will occur, there is also a growing need for measures to adapt to the consequences of climate change - especially in some developing countries - and obviously for the money to finance those measures. It is in this perspective that the Adaptation Fund (AF) under the Kyoto Protocol must be viewed.

At a colloquium on Sustainable Development and Globalisation held by VODO in november 2001, Prof. Dr. Marc PALLEMAERTS¹⁹ stated that the issue of ecological debt was an important aspect of the *Bonn agreements*, adopted at COP 6 - part II²⁰ of the UNFCCC negotiating process. In his view, the creation of the AF under the Bonn agreements was “*the first significant step towards repaying a part of that ecological debt*”. Indeed, for the first time, “*an international financial mechanism was created that would make funds available to help the developing countries most vulnerable to the effects of climate change, in taking action to adapt and to protect their population and ecological systems against the impact of climate change.*” PALLEMAERTS admitted that the funds at that point were still too small, but that politically this was an important gesture.

Today, the AF is not yet operational, because the Kyoto Protocol itself has not yet entered into force. But when it does, the AF will finance the implementation of *concrete* adaptation projects and programmes in non-Annex I Parties, including the following adaptation activities: avoidance of deforestation, combating land degradation and desertification.

Finance of the fund will be generated by a 2% share of proceeds on the clean development mechanism project activities and other sources of funding.²¹ Annex I Parties are also invited to provide additional funding. The AF will be managed by the Global Environment Facility (GEF).

The link with the concept of ecological debt is indeed obvious we believe: the fund could be considered as a first step in repaying a part of the *carbon debt* owed by industrialised countries (infra, modular research energy / climate change).

The Bonn agreements further established two – voluntary – funds under the UNFCCC²² that, *inter alia*, deal with adaptation: a *Special Climate Change Fund* (SCCF) and a *Least Developed Countries Fund* (LDCF). The SCCF was established to finance activities,

¹⁹ At the time a member of the Belgian delegation in the UNFCCC negotiating process. See: http://www.vodo.be/documenten/T_es_eindverslag%20VODOconfRio%2B10.doc, p. 67.

²⁰ Resumed session of the Sixth Conference Of the Parties to the UNFCCC (Bonn, July 2001). Parties failed to reach an agreement at COP 6 (The Hague, November 2000). The decision to establish an Adaptation Fund was *formally adopted* at COP 7 (Marrakech, October/November 2001). See Decision 10/CP.7, available at <http://unfccc.int/resource/docs/cop7/13a01.pdf>

²¹ See Decision 17/CP.7, par. 15 (a), available at <http://cdm.unfccc.int/EB/COPMOP>

²² Again, the decision was formally adopted in Marrakech. See Decision 7/CP.7, available at <http://unfccc.int/resource/docs/cop7/13a01.pdf>

programmes and measures in the area of, among other things, *adaptation* that are *complementary* to those already funded by the GEF. The LDCF was established to support a *work programme* for the least developed countries. This work programme shall include, *inter alia*, national *adaptation* programmes of action.

Equitable benefit sharing under the CBD and the ITPGR

Some articles in the *CBD* explicitly state that regarding the commercial and other use of certain natural resources - genetic resources - the benefits arising from that use, through intellectual property rights etc., should be shared in a fair and equitable way with the country providing these genetic resources.

Art. 8 – In situ conservation

Each Contracting Party shall, as far as possible and as appropriate:

(...)

(j). Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the *equitable sharing of the benefits* arising from the utilization of such knowledge, innovations and practices

Art. 15 – Access to Genetic Resources

(...)

(7). Each Contracting Party shall take legislative, administrative or policy measures, as appropriate, and in accordance with Articles 16 and 19 and, where necessary, through the financial mechanism established by Articles 20 and 21 with the aim of *sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources*. Such sharing shall be upon mutually agreed terms.

Article 19 – Handling of Biotechnology and Distribution of its Benefits

1. Each Contracting Party shall take legislative, administrative or policy measures, as appropriate, to provide for the effective participation in biotechnological research activities by those Contracting Parties, especially developing countries, which provide the genetic resources for such research, and where feasible in such Contracting Parties.

2. Each Contracting Party shall take all practicable measures to promote and advance priority access on a *fair and equitable basis* by Contracting Parties, especially developing countries, *to the results and benefits arising from biotechnologies based upon genetic resources provided by those Contracting Parties*. Such access shall be on mutually agreed terms.

(...)

These articles clearly act counter to bio-piracy and although obviously the contents of terms like ‘equitable’ and ‘fair’ is unclear and not defined²³, the value of these articles should not be underestimated.

More and more agreements have been made between companies belonging to the bio-industry

²³ A possible definition of ‘equity’ in this context is the *balance between rights and legal institutions seeking to allow retribution, distribution and participation of various benefit claimers in the process of dividing gains arising from natural genetic resources*. It would be difficult to establish one parameter to determine what is equitable, it seems like this would have to be considered on a case-by-case basis. S. PENA NEIRA Draft Ph. D Thesis.

and countries providing the genetic resources for research and development activities of those companies. The return for the country itself should then consist of a (considerable) basic fee and a percentage of the profits of valuable products that were the result of the research, like medicines for example.²⁴

Another treaty worth mentioning in this regard is the recent *ITPGR*²⁵, which is in harmony with the CBD. One of its objectives is the fair and equitable sharing of benefits derived from the use of plant genetic resources (PGR) for food and agriculture. For this purpose, a Multilateral system for Access and Benefit-Sharing is established (Art. 10-13). Resources may be obtained from this system for the purpose of utilization and conservation in research, breeding and training for food and agriculture. In case a product is developed using these resources, the text provides for payment of an equitable share of the benefits arising from the commercialisation of that product. However, if the product may be used by others for further research without restriction, payment is voluntary only. Benefits will furthermore be shared through exchange of information, access to and transfer of technology and capacity-building.²⁶

These are some of the scarce passages in MEAs that say something about the use of natural resources on payment of an equitable compensation.²⁷

The link with the concept of ecological debt is that for genetic resources, according to the text of the MEAs, an equitable compensation *is provided for* – although in reality this is not always the case.

2.1.2. Case law

2.1.2.1. Direct reference?

²⁴ Examples are the Bioamazonia-Novartis contract (Brazil) and the Merck-INBIO contract (Costa Rica). However, bioprospection contracts are being criticised by NGOs for not being truly fair or even reasonable given e.g. the enormous gap between the provided fees and the profits of the companies in question.

²⁵ The ITPGR entered into force on 29 June 2004. Belgium has signed this convention, but until now hasn't ratified it. See: <http://www.fao.org/Legal/TREATIES/033s-e.htm>

²⁶ Another central issue in the ITPGR is the recognition of *Farmers' Rights* (Art. 9). The text recognizes the enormous contribution that the local and indigenous communities and farmers of all regions of the world have made and continue to make to the conservation and development of PGR. Farmers' rights include the protection of traditional knowledge, the right to equitably participate in benefit-sharing arising from the use of PGR for food and agriculture and the right to participate in national decision-making processes about PGR. Implementing these rights however, is being left to the national governments.

²⁷ Although not completely similar, worth mentioning in this regard is the United Nations Convention on the Law Of the Sea (UNCLOS), that explicitly refers to *equity* when it comes to solving problems concerning delimitation of fisheries zones (e.g. Art. 59 and 74) or distributing the payments and contributions with respect to the exploitation of the continental shelf beyond 200 nautical miles (Art. 82). See: BIERMANN, F., "Justice in the Greenhouse: Perspectives from International Law", in TÓTH, F. (ed.), *Fair weather: equity concerns in climate change*, London, Earthscan, 1999, 162.

Until now, no cases containing direct reference to the concept of ecological debt have been found.

2.1.2.2. Links

State Responsibility

International jurisdiction concerning state responsibility that is cited as being relevant for transboundary environmental damage, is rather scarce: the most relevant cases are well-known. There's the *Chorzów Factory case* (1928)²⁸, the *Trail Smelter Arbitration* (1941)²⁹, the *Corfu Channel case* (1949)³⁰, the *Lac Lanoux Arbitration* (1957)³¹ and the *Gabcikovo-Nagymaros case* (1997)³².

The *Trail Smelter Arbitration* dealt with transboundary damage done to American farmers by sulphur dioxide emissions from a smelter plant in Trail, British Columbia. In the decision of the Tribunal a general principle of international law was recognised, namely that “*a state owes at all times a duty to protect other States against injurious acts by individuals from within its jurisdiction*”.³³ Based upon decisions of the United States (US) Supreme Court in disputes between US member States, the Tribunal concluded that “*under the principles of international law, as well of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence*”.³⁴ In other words, the government of a country has to make sure that companies on its territory do not cause serious damage to other countries or their inhabitants, otherwise the State could incur responsibility. A State can be responsible not only by *acting*, but also by *neglecting*: allowing private companies (in this case the ‘Consolidated Mining and Smelting Company of Canada, Ltd.’) to undertake detrimental activities on its territory. The decision of the Tribunal was clearly also inspired by such principles and adages as ‘good neighbourliness’ and *sic utere tuo ut alienum non laedas* (you should use your property in such a way as not to cause injury to your neighbour’s).

Similarly, in the *Corfu Channel case*, the International Court of Justice (ICJ) – in its very first judgement – stated that states have the duty “*not to allow knowingly their territory to be used for acts contrary to the rights of other states*”.³⁵

Although the concept of State sovereignty was strongly endorsed in the *Lac Lanoux Arbitration*, the Tribunal also admitted that this principle must function within the realm of

²⁸ Permanent Court of International Justice (PCIJ) Reports Series A, N° 17. The PCIJ was the predecessor of the current International Court of Justice (ICJ).

²⁹ III Reports of International Arbitral Awards (RIAA), 1905.

³⁰ ICJ Reports 1949, 4.

³¹ XII RIAA, 281.

³² ICJ Reports 1997, 78.

³³ Even before this decision, a Tribunal in the *Island of Palmas Arbitration* (1928) had stated that as a component of its territorial sovereignty, a State must – within its own territory – observe the rights of other States. II RIAA, 1949.

³⁴ III RIAA, 1965.

³⁵ ICJ Reports 1949, 22.

international law: “*Territorial sovereignty plays the part of a presumption. It must bend before all international obligations, whatever their source, but only for such obligations*”. In this case there was the double duty of France to provide information to and consult with Spain in planning and carrying out a project of generating electricity by draining water from Lac Lanoux in the Pyrenees. This sentence is viewed as a confirmation that the territorial sovereignty of States is no longer an absolute or unconditional power.³⁶

Before these decisions, the judges in the *Chorzów Factory case* – which dealt with expropriated property – had stated “*that it is a principle of international law, and even a general conception of law, that any breach of an engagement involves an obligation to make reparation...*”. In other words, a breach of an obligation triggers a second obligation to make reparation. In that case, first of all, it should be examined if a *restitutio in integrum* (or a re-establishment of the situation which existed before the wrongful act) is possible, which will not always be the case. If not, reparation should consist of a monetary compensation: the State could request the payment of damages for its own losses and of its citizens.³⁷

The *Gabcikovo-Nagymaros case* dealt with a cross border system of locks and integrated hydro-electric power stations on the Danube between the Czechoslovak Republic and Hungary. A treaty had been signed between the two countries in 1977 regarding partial river diversion and the construction of locks, but Hungary unilaterally terminated the agreement after growing domestic protest against the expected negative environmental effects of the project. Slovakia, as successor to Czechoslovakia in 1993, had subsequently proceeded to an ‘alternative solution’ of river diversion which led to a massive water level drop. The ICJ found that both States had breached their obligations and that the 1977 treaty was still in force. Besides the separate opinion of ICJ Vice-President Weeramantry, in which he declared that the *principle of sustainable development* is a recognized principle of contemporary international law, relevant for this section are the paragraphs in which the ICJ discusses the legal consequences of its judgement.³⁸ Since the 1977 treaty still exists, it further governs the relationship between the Parties. The latter will have to come to an agreement on the modalities of its implementation and the *protection of the environment* will have to be a *key issue* in this regard. There rests a continuing obligation on both Parties to maintain the Danube’s water quality and to protect nature. The Court recalls that, concerning environmental protection, vigilance and prevention are needed given the often irreversible nature of environmental damage. New norms and standards have been developed the last 20 years and these will have to be taken in consideration by the Parties, not only when starting new activities, but also when continuing older activities. “*This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development. For the purposes of the present case, this means that the Parties together should look afresh at the effects on the environment of the operation of the Gabcikovo power plant. In particular they must find a satisfactory solution for the volume of water to be released into the old bed of the Danube and into the side-arms on both sides of the river*”.³⁹

Important for the concept of ecological debt is that nowadays, the first-mentioned obligation to prevent or abate transboundary environmental harm is accepted as a rule of customary

³⁶ DUPUY, P.-M., *Droit International Public*, Paris, Dalloz, 2000, 62.

³⁷ PCIJ Reports Series A, N°17, 27-28; Also: Trail Smelter Arbitration, III RIAA, 1913 and 1938.

³⁸ Paras. 125-154.

³⁹ ICJ Reports 1997, 78, para. 140.

international law⁴⁰, which makes it equally binding for all countries. But it is not however, an absolute obligation. Because of the limiting conditions expressed in the Trail Smelter sentence (“*serious consequence*”, “*the injury is established by clear and convincing evidence*”) one cannot claim that there’s a customary international law rule obliging States to prevent or abate every transboundary harm, however small.⁴¹ In fact, states only have a ‘due diligence’ or ‘due care’ obligation to prevent and/or fight considerable transboundary damage.⁴²

This is also expressed by the International Law Commission (ILC)⁴³ in its “Draft Articles on State Responsibility for Internationally Wrongful Acts”⁴⁴, where in the commentary on the articles, it is said that “*obligations of prevention are usually construed as best efforts obligations, requiring States to take all reasonable or necessary measures to prevent a given event from occurring, but without warranting that the event will not occur*” and where the obligation to prevent transboundary damage by air pollution, dealt with in the *Trail Smelter* arbitration, is mentioned as an example.

The ‘due diligence’ or ‘due care’ obligation of the State implies that legislation should be enacted and administrative measures should be taken to prevent considerable damage: the state should, in other words, exhibit good governance.⁴⁵

Applying the foregoing to the concept of ecological debt, the issue of *climate change damage* obviously stands out and has recently received some attention by scholars.⁴⁶ Some argue that “*there will be a general obligation of industrialised nations under international law to*

⁴⁰ MAES, F., *Internationaal Milieurecht*, Academic Course 2001-2002, part 1, 54 and references there: Experts Group on Environmental Law of the World Commission on the Environment and Development (hereafter WCED), *Environmental Protection and the Sustainable Development. Legal Principles and Recommendations*, London, Graham & Trotman, 1987, 85; SMITH, B.D., *State Responsibility and the Marine Environment. The Rules of Decision*, Oxford, Clarendon Press, 1988, 76; BOYLE, A., “Nuclear Energy and International Law: An environmental Perspective”, 60 *BYIL*, 1989, 269-271;

Some authors however are not convinced that the principle is sufficiently supported by state practice: SCHACHTER, O., “The emergence of International Environmental Law”, 44 *Journal of International Affairs*, 1991, 462; ZEMANEK, K., “State Responsibility and Liability”, in Lang W., Neuhold, H. en Zemanek, K. (Eds.), *Environmental Protection and International Law*, London, Graham & Trotman, 1991, 188.

⁴¹ WCED, *o.c.*, 76: “*Indeed such a stringent requirement which has also been rejected in the practice of States would unduly restrict the activities of neighbouring countries*”.

⁴² KOOIJMANS, P.H., *Publiekrecht in vogelvlucht*, Deventer, Kluwer, 2002, 113; COGEN, M., *Handboek Internationaal Recht*, Mechelen, Kluwer, 2003, 119.

⁴³ The ILC is a UN body assigned with the promotion of the codification and development of international law.

⁴⁴ UN doc. A/56/10, Chapter 4, 145. Available at <http://www.un.org/law/ilc/reports/2001/english/chp4.pdf>

⁴⁵ MAES, F., *Internationaal Milieurecht*, Academic Course 2001-2002, part 1, 56 and references there: MORIN, J.-Y., “La pollution des mers au regard du droit international”, in KISS, A. (Ed.), *La protection de l’environnement et le droit international. Colloque Académie de droit international de la Haye*, Leiden, Sijthof, 1975, 325; HANDL, G., “Liability as an Obligation Established by a Primary Rule of International Law”, 16 *NYIL*, 1985, 59; SMITH, B.D., *o.c.*, 36-43; BOYLE, A., *l.c.*, 272-273; SCOVAZZI, T., “Recent trends in International Environmental Law”, in SCOVAZZI, T. and TREVES, T. (Eds.), *World Treaties for the Protection of the Environment*, Milano, Istituto per l’Ambiente, 1992, 23; BIRNIE, P., “Protection of the Marine Environment: The Public International Law Approach”, in DE LA RUE, C.M. (Ed.), *Liability for damage to the Marine Environment*, London, Lloyd’s of London Press Ltd., 1993, 6.

⁴⁶ TOL, R.S.J. and VERHEYEN, R., “State responsibility and compensation for climate change damages – a legal and economic assessment”, *Energy Policy* 32, 2004, 1109-1130. Available at: <http://www.uni-hamburg.de/Wiss/FB/15/Sustainability/enpolliability.pdf>; STRAUSS, A.J., “The Legal Option: Suing the United States in International Forums for Global Warming Emissions”, 33 *ELR*, 2003, 10185-10191. Available at: <http://www.climatelaw.org/media/strauss.pdf>

compensate developing nations for damage resulting from anthropogenic climate change”, although a lot of legal as well as factual problems remain.⁴⁷ Probably one of the most important is answering the question whether or not it can be established – in accordance with the traditional view on state responsibility – that industrialised countries have in fact *disregarded ‘due diligence’* (cf. supra) or did not act ‘with appropriate care’. It would, in other words, be necessary to prove a breach of a due care duty, or negligence: emitting GHG or allowing emissions to take place must be shown to be negligent in some way.⁴⁸ In general, the standard of appropriate care has to be determined according to the actual circumstances and obligation in question; in the case of GHG emissions different methods for determining this standard are conceivable. *Foreseeability* is one possible concept: generally, a State acts negligent if it could have foreseen potential damage. However, “*it is unclear whether the knowledge of climate change that could result from GHG emitting activities fulfils this criterion or whether a state must have foreseen (i) the general or (ii) the precise nature of the damage that such changes can cause*”.⁴⁹ Because of the cumulative effect of GHG emissions, the question whether States were and are able to do something to considerably reduce their emissions – which would consequently reduce their contribution to future climate change damage, then becomes more important. Another standard could be the use of *Best Available Techniques*: did a country take all necessary measures to prevent further emissions by using the best energy efficient and / or even carbon-free technologies? Another possible way to determine negligence is to consider the *risk involved*: the bigger the risk, the greater the necessity to take appropriate measures to prevent that risk from materialising.⁵⁰

Eventually, the question whether or not industrialised countries acted / are acting with appropriate care in this regard, will have to be answered in a Court – such as the ICJ or the International Tribunal of the Law of the Sea – or through alternative dispute resolution.⁵¹ Apart from all the difficulties in actually suing a particular State in an international forum (e.g. jurisdiction by a Court over a State must be based upon the consent of that State, the plaintiff must have a sufficiently individualizable interest in the suit, problems of causation...), some argue that the possibilities of a climate change damage case appearing before an international tribunal are not negligible per se and that a claim is much less difficult to conceive than approximately 10 years ago.⁵²

Apart from climate change related issues, another State responsibility case that is interesting for the concept of ecological debt is the *Certain Phosphate Lands in Nauru Case* (1992).⁵³ Phosphate mining on the island in the Pacific Ocean had been initiated by the German colonizer, but after World War I, Nauru fell into the hands of the Australians. Eventually, Australia, New Zealand and the United Kingdom, together constituted the *Administering Authority for the Trust Territory of Nauru*. After World War II, Australia became the chief administrator of the UN Trusteeship that included Nauru, until the island became independent in 1968.

Phosphate mining on the island had caused serious environmental degradation and in 1989 the Republic of Nauru filed suit with the ICJ against Australia. Nauru demanded compensation

⁴⁷ TOL, R.S.J. and VERHEYEN, R., *o.c.*, 1109.

⁴⁸ *Ibid.*, 1112-1113.

⁴⁹ *Ibid.*, 1117.

⁵⁰ *Ibid.*, 1118.

⁵¹ STRAUSS, A.J., *o.c.*, 10185-10187.

⁵² TOL, R.S.J. and VERHEYEN, R., *o.c.*, 1119.

⁵³ (Nauru vs. Australia), ICJ Reports 1992, 240.

for the environmental damage that resulted from the mining that took place prior to its independence. Proceedings were commenced against Australia, although obviously Nauru also could have challenged New Zealand and the UK: the acts performed by Australia involved both joint conduct of several States and day-to-day administration of a territory by one State acting on behalf of other States as well as on its own behalf. The ICJ allowed this, stating that, as long as the interests of a State that is not party to a dispute, will not be affected by the judgement⁵⁴, the plaintiff is not required to challenge every possible defendant.

Still, the Australian objections were numerous. The country argued that a State responsibility claim relating to the period of its joint administration of the Trust Territory could not be brought decades later, even if the claim had not been formally waived. The Court rejected the argument, applying a liberal standard of unreasonable delay and it continued that: “*it will be for the Court, in due time, to ensure that Nauru’s delay will in no way cause prejudice to Australia with regard to both the establishment of the facts and the determination of the content of the applicable law.*” Obviously the Court had the intention to apply the law in force at the time the claim arose. That point of view had inevitably been taken by the plaintiff itself, since its claim was based on a breach of the Trusteeship Agreement, which ended when Nauru became independent. The reasoning was that the responsibility of Australia, once engaged under the law in force at a given time, continued to exist even if the primary obligation had subsequently terminated. Another Australian objection was that Nauru itself was mostly responsible for the pollution since two-thirds of the mining occurred after independence and that moreover agreements made at the time of independence nullified any future claims. The ICJ again dismissed, saying that the argument did not end with independence, and that the “agreements” concluded before independence did not absolve Australia of any blame.⁵⁵

Eventually, the ICJ never passed a judgement on the contents of the case, since the dispute was solved by an out of court settlement between the parties. Australia seems to have paid \$A 57 million in cash and pledged \$A 50 million over a period of 20 years. Furthermore, the UK and New Zealand have each pledged contributions of \$US 8 million. The difficulty with out of court settlements, however, is that it is usually unclear what exactly is being paid for.

Cases under the Alien Tort Claims Act⁵⁶

Although for our research we chose to concentrate on the ecological debt accumulated by states (supra, core research), here it might also be useful to briefly touch upon the question of what could be done to stop harmful activities of *transnational companies* in this regard. The Alien Tort Claims Act (ATCA)⁵⁷ is brought to the fore as an interesting piece of legislation in this context. The ATCA, enacted in 1789, is US civil responsibility legislation enabling aliens (i.e. non US-citizens) to claim, before a US court, damages for a tort resulting from a violation of *customary international law* or of a *treaty of the United States*.

Since the 1980s there has been a growing trend to try use the law to sue foreign *individuals* in

⁵⁴ For instance, by finding illegal behaviour of this third party as a prerequisite for the claim in question.

⁵⁵ See: <http://www.american.edu/TED/Nauru.htm>; http://www.abc.net.au/asiapacific/focus/pacific/GoAsiaPacificFocusPacific_1091170.htm.

⁵⁶ Many thanks go to Lic. Jur. Karin Wirén who did research on this topic and whose findings were used as a basis for this section.

⁵⁷ The Alien Tort Claims Act, 28 U.S.C. §[1350]. The act was originally drafted to deal with piracy.

US courts for human rights abuses.⁵⁸ State action is not always necessary for violation of law of nations: some violations are actionable even if perpetrated by (private) non-state actors.⁵⁹ However, these violations are generally limited to clear human rights abuses such as slavery, forced labour, genocide, war crimes and piracy.

Very recently, an American Court has let a suit go to trial to consider under the ATCA whether a *US corporation* can be punished for alleged violations of international law. The case is about *Unocal*, a Californian oil company that allegedly provided ‘assistance’ and ‘encouragement’ to human rights abuses committed by the Myanmar military government during the construction of a Unocal pipeline in that country.⁶⁰ The plaintiffs, Myanmar villagers, claim that these violations – forced labour, forced relocation of inhabitants and even arbitrary killings – were committed in furtherance and for the benefit of Unocal who had a joint-venture type relationship with the dictatorship and very likely knew of the abuses. Jurors now could hold Unocal liable if they determined its subsidiaries acted as agents of or were engaged in a joint venture with the company. Unocal threatens to become the first case in which an American-based corporation will stand trial on the merits in federal court for alleged violations of ‘specific, universal, and obligatory’ international norms.

Although the ATCA has particularly been used in the context of international human rights violations, more and more, plaintiffs are also trying to use the act to assert *environmental claims*. Unfortunately, until now courts often decline to reach the merits of ATCA cases when the latter rest on environmental rather than strict human rights claims: district courts have often dismissed environmental cases on procedural or jurisdictional grounds.⁶¹

In Ecuador, exploitation of oil reserves by Texaco destroyed huge areas of rain forest, contaminated water supplies, destroyed crops through ‘black rain’, and further caused numerous health problems from exposure to contaminated air and water. The district court in *Aguinda v. Texaco*⁶², granted the defendant's motion to dismiss on forum non conveniens (inadequate forum) grounds. The Second Circuit⁶³ however, reversed, holding that, firstly, dismissal should have been conditioned on Texaco's submitting to the jurisdiction of the courts in Ecuador and that, secondly, the district court failed to sufficiently balance the relevant factors before declining to exercise jurisdiction. The district court engaged in the more thorough forum non conveniens analysis requested by the Second Circuit but reached the same conclusion: dismissal because Ecuador was a more appropriate forum for litigation.⁶⁴ The Second Circuit never came to the actual legal question whether

⁵⁸ E.g. *Filartiga v. Pena-Irala* 630 F.2d 876 [2d Cir. 1980], *Kadic v. Karadzic* 70 F.3d 232 [2d Cir. 1995].

⁵⁹ *Kadic v. Karadzic* 70 F.3d 232 [2d Cir. 1995].

⁶⁰ *John Doe v. Unocal Corp.*, 2002 WL 31063976, Nos. 00-56603, et al. 9th Cir. Sept. 18, 2002.

⁶¹ It should be noted however, that in the *Beanal v. Freeport McMoran, Inc.* case (1997), the court stated that the ATCA may also be applicable to international environmental violations. The court's willingness to consider environmental damage as a potential violation of human rights could be considered as a sign of a growing recognition that environmental damage indeed may violate individual human rights. Unfortunately, all of *Beanal's* complaints were eventually dismissed. *Beanal v. Freeport McMoran, Inc.*, 969 F. Supp. 362, 383 [E.D. La. 1997]; In appeal: *Beanal v. Freeport McMoran, Inc.*, 197 F.3d 161 [5th Cir. (La.) Nov. 29, 1999].

⁶² *Aguinda v. Texaco, Inc.*, 142 F. Supp. 2d 534 [S.D.N.Y. 2001] ; See also : <http://www.texacorainforest.org>

⁶³ *Aguinda v. Texaco, Inc.*, 303 F.3d 470 [2d Cir. 2002].

⁶⁴ To dismiss on forum non conveniens is rather questionable in this case. The Constitution of Ecuador includes the right to an environment free of contamination but the judicial system provides no practical means for private citizens to redress environmental harm. Texaco's liability for damage depends whether the company was negligent or malicious. In the complaint plaintiffs stated that procedural barriers in Ecuador make it an

environmental damage can create a violation of human rights.

A case that seriously limited the scope of the ATCA was *Flores v. Southern Peru Copper Corp.* The plaintiffs brought personal injury claims under the ATCA against a mining company whose operations had resulted in the emissions of large quantities of sulphur dioxide and very fine particles of heavy metals into local air and water. Plaintiffs claimed that the company's conduct violated international law. In particular, they asserted that the defendant infringed upon their customary international law "right to life", "right to health", and "right to sustainable development", which they attempted to establish using general declarations, United Nations General Assembly (UNGA) resolutions and writings of scholars. Unfortunately, the District Court for the Southern District of New York judged that plaintiffs had not "*demonstrated that high levels of environmental pollution within a nation's borders, causing harm to human life, health, and development, violate well-established, universally recognized norms of international law*".⁶⁵ The Court further held that, in this case, even if plaintiffs had demonstrated such a violation, the case would have to be dismissed on forum non conveniens grounds because Peru provides an adequate alternative forum for plaintiffs' claims and because public and private interest factors weigh heavily in favour of the Peruvian forum.⁶⁶ Consequently, the District Court granted defendant's motion to dismiss.

The Flores case created a strict theory for determining what is international customary law in the context of the ATCA. While the *Filartiga* case⁶⁷ encouraged plaintiffs to uncover evolving standards of customary international law, the court in the *Flores* case rejected general declarations and UNGA resolutions as primary sources of customary international law. The Flores case gives a theory of international law as a positive law addressed to the conduct of all states, but certain criteria must be met before an alleged wrongful act can be deemed a violation of customary international law. First of all, it must be a principle that states universally abide by. Secondly, this must be done out of a sense of legal obligation. Thirdly, only wrongs of mutual concern will be considered.⁶⁸ Customary international law addresses only matters of mutual concern⁶⁹ among nations, rather than the several domestic concerns of States. In an old case⁷⁰ this was explained with the difference between piracy and robbery. Only the prohibition of piracy is considered as being part of customary international law, although every nation's domestic law prohibits theft. Another illustration could be the murder of one private party by another. Even if these conducts are universally proscribed by States in their domestic law, that does not make it customary international law. Offences as torture and genocide on the other hand, do violate customary international law because the nations of the world have demonstrated that such wrongs are of mutual concern.

Another case where environmental claims were involved was *Wiwa v. Royal Dutch Petroleum Co*⁷¹. Plaintiffs claimed that the oil companies operating in Niger delta, in addition to being

inadequate forum. The plaintiff cannot call witnesses unless opposing parties agree, no cross-examination of witnesses no provision for class action suits. Half of Ecuador's export money comes from oil.

⁶⁵ *Flores v. Southern Peru Copper Corp.*, 253 F. Supp. 2d 510, 525 [S.D.N.Y. 2002].

⁶⁶ *Flores v. Southern Peru Copper Corp.*, 253 F. Supp. 2d 510, 544 [S.D.N.Y. 2002].

⁶⁷ A human rights case where the court acknowledged that it had to examine evolving standards of customary international law; see footnote 58.

⁶⁸ BARIST, J., and NAGEL J., "Outside Counsel; Flores Limits the Sources of Customary International Law", *New York Law Journal*, nov. 17, 2003.

⁶⁹ *Filartiga v. Pena-Irala*, 630 F.2d 876, 888 [2d Cir. 1980]. see *IIT v. Vencap, Ltd.*, 519 F.2d 1001, 1015 [2d Cir. 1975]

⁷⁰ *United States v. Smith*, 18 U.S. [5 Wheat.] 153, 161-62 [1820].

⁷¹ *Wiwa v. Royal Dutch Petroleum Co*, 226 F.3d 88 [2nd Cir. (N.Y.) 2000].

complicit in torture and murder by security forces, appropriated land for oil development without adequate compensation and caused substantial pollution of the air and water. The district court found that the United Kingdom provided an adequate alternative forum and granted the oil companies' motion to dismiss on grounds of, *inter alia*, *forum non conveniens*. The appellate court, however, reversed and remanded for *further proceedings*, noting the interest of the United States in furnishing a forum for aliens suing domestic entities for violations of the law of nations, as well as the burden on plaintiffs of requiring them to recommence litigation in a different forum. Crucial to these decisions were the lack of an adequate forum where the injuries occurred and the U.S. resident status of at least some of the plaintiffs.

In 1984, a gas leak at a pesticide manufacturing plant in *Bhopal* owned by an Indian subsidiary of the US corporation Union Carbide killed an estimated 2100 people and injured 200 000 more. Union Carbide took the moral responsibility for the gas leak and paid a small sum of \$US 470 million to the Indian government as part of an out-of-court settlement in 1989. In *Bano v. Union Carbide Corp.*⁷², the plaintiffs alleged that the defendant's actions leading to the disaster violated international norms of conduct. The district court dismissed the ATCA claims for *forum non conveniens*. The Second Circuit affirmed the dismissal after concluding that the plaintiffs' claims had been fully litigated and settled in India.

*Sarei v. Rio Tinto Plc*⁷³ involved an ATCA claim by inhabitants of Bougainville, an island off Papua New Guinea, claiming that Rio Tinto Plc and Rio Tinto Ltd., British and Australian companies, were part of a mining group that caused severe environmental damage to the island, damaged the health of the local population, and incited civil war. The alleged ecological damage included destroying vast areas of rain forest, dumping one billion tons of waste into the island's rivers, destroying fish that comprised the island's major food source, polluting the island's air and damaging the island's crops. The defendants moved to dismiss for *forum non conveniens*, arguing that Papua New Guinea, Australia, or Britain provided a more appropriate forum. The defendants' motion to dismiss was granted on Act of State Doctrine and Political Question Doctrine grounds. However, the court stated that, but for these judicially made doctrines, the plaintiffs had adequately alleged that the company met the state action requirement and pled violations of the law of war and crimes against humanity under ATCA.

In conclusion, one could say that until now, the ATCA does not prove to be a very good basis to get compensation for environmental claims. To date, plaintiffs have not succeeded in obtaining federal jurisdiction over ATCA claims relating to the industrial activities abroad of private corporations. Courts repeatedly have refused to expand the ATCA to apply to ordinary personal injury and environmental tort claims against non-state actors.⁷⁴ The ATCA would be very useful on the other hand if you could actually prove that there is in fact an 'environmental' human right.

Cases before Human Rights Commissions or Committees⁷⁵

⁷² *Bano v. Union Carbide Corp.* 273 F.3d 120 [2d Cir. (N.Y.) 2001].

⁷³ *Sarei v. Rio Tinto Plc* 221 F.Supp.2s 1116 [CD.Cal Jul 09, 2002].

⁷⁴ Nickles, P., Cabbage III, T. And Honig, E., "Court Properly Limits Scope of Alien Tort Claims Act, Legal Backgrounder, 2003 Vol. 18, No. 2.

⁷⁵ Many thanks go to Lic. Jur. Karin Wirén who did research on this topic and whose findings were used as a basis for this section.

In 2001, the **African Commission on Human and Peoples' Rights** concluded a communication⁷⁶ under art. 55 of the African Charter on Human Rights and Peoples' Rights. The text stated that the military government of Nigeria had been involved in irresponsible oil development practices in the Ogoni region. The state oil company had formed a joint venture with Shell Petroleum Development Corporation, that had caused widespread contamination of the environment. The Commission concluded that there had been several violations of the charter. There was a violation of the right to health⁷⁷ and the right to a healthy environment, which means a clean and safe environment.⁷⁸ A state must take measures to prevent pollution and ecological degradation, yet in this case the government had on the contrary been actively involved in causing the pollution. There was also a violation of the right to housing⁷⁹ and the right to food.⁸⁰ The committee gave recommendations to the new Nigerian government to investigate the human rights violations and to prosecute officials of the security forces and of the Nigerian national petroleum company, because it is not acceptable to let private persons act freely and with impunity to the detriment of the rights recognised by the convention. The victims should be compensated and a clean-up of land and rivers polluted by the oil operations should be undertaken. Environmental and social impact assessments should be part of future operations. It should be noted, however, that the Nigerian Government was not a part of the procedure: the commission decided on the facts as presented by the plaintiffs. The violations were committed by the former dictatorial Nigerian regime and the new government was not involved in these crimes. It has been suggested that strong language was used because it is more or less safe to criticise the old government.⁸¹

Another interesting case is *Bernard Ominayak and the Lubicon Lake Band v. Canada*⁸², brought up before the **Human Rights Committee of the United Nations**.⁸³ Basically, this case is about the right to self-determination and the right to dispose freely of one's natural wealth and resources. Chief Ominayak is the leader of the Lubicon Lake Band, a Cree Indian band living within the borders of Canada. Although the Canadian government had recognized the right of the original inhabitants of the area to continue their traditional way of life with the Indian Act of 1970, land had been expropriated for oil and gas exploitation. The case includes an extensive discussion about whether domestic remedies have been properly exhausted. The Lubicon Lake Band could probably have shortened the process by choosing a different path of judicial procedure but the committee is not convinced that in that case, they would have been offered an effective remedy. The conclusion of the Human Rights Committee is that "*historical inequities to which the state party refers*" (i.e. old oil concessions) and "*certain more recent developments*" threaten the way of life and culture⁸⁴ of

⁷⁶ Available at <http://www.cesr.org/text%20files/nigeria.PDF>

⁷⁷ Article 16.

⁷⁸ Article 24.

⁷⁹ The right to housing is based upon a combination of article 14 (right to property), article 16 (right to health) and article 18 (family rights). As a minimum the Nigerian government cannot destroy homes of its citizens.

⁸⁰ The right to food is based upon a combination of article 4 (right to life), article 16 (right to health) and article 22 (the right to economic, social and cultural development).

⁸¹ Coomans, F., "The Ogoni Case Before The African Commission On Human And Peoples' Rights", *International and Comparative law quarterly*, July 2003, 749.

⁸² *Bernard Ominayak and the Lubicon Band v. Canada* Communication No. 167/1984: Canada. 10/05/90. CCPR/C/38/D/167/1984. (Jurisprudence) UN Human Rights Committee.

⁸³ Established under article 28 of the International Covenant on Civil and Political Rights.

⁸⁴ This is a violation of art. 27 of the Covenant on Civil and Political Rights, which stipulates: "*In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language*".

the Lubicon Lake Band, and furthermore constitute a violation of article 27 of the International Covenant on Civil and Political Rights as long as they continue. This is a recognition that oil and gas exploitation is threatening the right to life and culture. The Canadian governments' argument that there was no irreparable damage to the traditional way of life did not get much attention. In one individual opinion, it was suggested that the right to culture should not be preserved at all costs. Changes are natural and refusal of changes can "*hamper the economic development of the society as a whole*". This view might have some substance but in this case the government more or less exhausted the conditions for living of the Cree Indian band. However, the formal offer of Canada to pay \$C 45 million in benefits and programmes in addition to a 95 square mile reserve was deemed appropriate by the Committee.

Even if exclusive rights have been given to indigenous people, these are not boundless. In New Zealand, Maori have got extensive rights to their lands, forests and fisheries according to the treaty of Waitangi. In the beginning of the nineties the government wanted to regulate all fisheries issues between parties. Some of the tribes objected and said that the agreement threatened their way of life. The Human Rights Committee in *Apirana Mahuika et Al. v. New Zealand*⁸⁵ said that there was no breach since the regime was based on reasonable and objective needs of sustainable development. A balancing was needed to avoid depletion of fish stocks.

These cases show that Human Rights Committees or Commissions can easily condemn past behaviour. Human rights law can protect individuals, but it has limitations. It must be viewed as only one aspect of bringing violation to light and applying public pressure to governments.

2.1.3. Other links

The Brazilian Proposal (for the moment still not part of international law)

Although no explicit reference to the term 'ecological debt' is made, an interesting proposal to bring the historical responsibilities of the industrialised countries concerning *climate change* into perspective, comes from Brazil.⁸⁶

The first decision adopted by the first conference of the Parties to the UNFCCC⁸⁷ in 1995 was to start a process to strengthen the commitments of the industrialised countries that are party to the convention, through the *adoption* of a *protocol* or *another legal instrument*. In this respect, Brazil prepared a proposal that suggested to share the burden for combating climate change *according to the effective responsibility of each country*. It suggested the use of an agreed simple climate model for estimating the earth's mean surface *temperature increase* resulting in GHG emissions from different countries. The emission reductions of each country would subsequently be based on its contribution to that temperature increase and not only on its current emissions. Since GHGs in the atmosphere today (and the related temperature increase) result from emissions accumulated over approximately 150 years,

⁸⁵ Communication No. 67/1992, *Apirana Mahuika et al v. New Zealand*. CCPR/C/7/D/547/1993.

⁸⁶ See: <http://www.mct.gov.br/clima/ingles/brasil/proposta.htm>; See document: FCCC/AGBM/1997/MISC.1/Add.3, available at <http://unfccc.int/resource/docs/1997/agbm/misc01a3.pdf>

⁸⁷ FCCC/CP/1995/Add.1, available at: <http://unfccc.int/resource/docs/cop1/07a01.pdf>

industrialised countries would have to account for those emissions as well. In other words, as the Brazilian Proposal shifts the focus of the debate to the induced temperature increase, the historical responsibility of the developed countries is brought to the fore.

The proposal was not adopted. The scientific and methodological aspects of it were questioned, and instead the *Kyoto Protocol* was designed using *1990 emissions* to share responsibility among the Annex I Parties to the UNFCCC.

Nevertheless, the proposal to set differentiated emission reduction targets for Parties according to the impact of their historic emissions on temperature rise, keeps turning up in climate change negotiations.⁸⁸ In 1998, the delegation of Brazil put forward a revised version of their proposal. The 11th session of the Subsidiary Body for Scientific and Technological Advice (SBSTA 11 - Bonn, October/November 1999) requested the secretariat to coordinate a review of the revised proposal by experts for SBSTA 14 (Bonn, July 2001). The secretariat organized a first UNFCCC expert meeting (28-30 May 2001 in Bonn, Germany) on the review of the scientific and methodological aspects of the proposal. SBSTA 14 later requested the secretariat to continue to coordinate the review of this proposal and until now, three expert meetings have been held, the last one on 8-9 September 2003, in Berlin.

The latest news is that SBSTA 17 (New Delhi, October/November 2002) requested the secretariat to organize a side event on this issue at the twentieth session, and it decided to review the progress of the work on the scientific and methodological aspects of the proposal by Brazil at its twenty-third session. Some think the Brazilian Proposal might still be useful in the discussions concerning the second commitment period of the *Kyoto Protocol*.⁸⁹

Statements

The term ‘ecological debt’ sometimes pops up at the international political level, mainly in political statements, during preparatory meetings of conferences or in policy reports. Especially during the preparatory meetings of the World Summit on Sustainable Development (WSSD – August/September 2002), one can find reference to the term. Examples are: the declaration of the Representative of India at Prep-Com II (for the WSSD)⁹⁰, the Civil Society Statement on WSSD⁹¹, the Meeting Report for Stakeholders Consultation in South Asia for the WSSD⁹². So far, no texts were found where the use of the notion ‘ecological debt’ at the same time is supported by an official study on the subject.

2.2. Obstacles for introducing ecological debt in international environmental law

2.2.1. Sovereign rights of states

⁸⁸ See: <http://unfccc.int/issues/ccc.html>

⁸⁹ See: <http://www.cckn.net/compendium/brazil.asp>

⁹⁰ See: <http://www.un.int/india/ind587.pdf>

⁹¹ See: http://www.unep.org/dpdl/cso/New_Docs_Recs/wssd.doc

⁹² See: <http://www.rrcap.unep.org/wssd/documents/02%20SA%20Meeting%20Records.pdf>

Based upon the *de jure equality* of states⁹³, one of the basic tenets in international law is that, generally, states cannot be bound without their consent. They are considered as sovereign actors with no other international obligations than the ones that were explicitly (by means of a treaty or a declaration) or silently accepted. Regarding natural resources, this idea is reiterated in several MEAs and soft-law instruments, inter alia by direct or indirect reference to Principle 21 of the Stockholm Declaration, which can be viewed as a statement of customary international law.

Principle 21: “States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”

Examples of references to this principle are: art. 3 of the CBD⁹⁴, the Preambles of the Vienna Convention, the UNCCD⁹⁵ and several other environmental treaties⁹⁶, Principle 2 of the Rio Declaration, and Principle 1 (a) and 2 (a) of the Forestry declaration.

However, it should be noted that in Principle 21 of the Stockholm Declaration the idea of sovereignty is accompanied by the phrase that States also have the responsibility towards protecting and conserving the environment. Basically, Principle 21 is a compromise between developmental rights and environmental concerns.⁹⁷ It is difficult to say which of those two prevails legally, but the least one could say is that there’s a certain balancing and a weakening of the absolute character of sovereign rights.

2.2.2. Future-orientated

Most of the links with the concept of ecological debt that were found so far are future-orientated. Even the principle of common but differentiated responsibilities, which is definitely based on a recognition of historical responsibility of industrialised countries, is used to shape *future obligations*. This is of course not quite the same as taking true remedial measures (e.g. providing compensation for past injustices). The essence of the concept of ecological debt is its retroactive character.

2.2.3. Use of natural resources with equitable compensation?

Finally, most links focus on pollution (e.g. through emissions) or damage in general; much less attention is given to the use of natural resources with equitable compensation. This

⁹³ Cf. Art. 2 (1) of the Charter of the United Nations.

⁹⁴ See also art. 15 (1) of the CBD.

⁹⁵ Which refers to Principle 2 of the Rio Declaration.

⁹⁶ Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (London, 1972), Convention on Long Range Transboundary Air Pollution (Geneva, 1979), Convention on the transboundary effects of industrial accidents (Helsinki, 1992).

⁹⁷ LAVRYSEN, L. & MAES, F., “Juridische grondslagen voor het (inter-)nationaal verdelen en gemeenschappelijk beheren”, in MAZIJN, B. (ed.), *Duurzame ontwikkeling: meervoudig bekeken*, Gent, Academia Press, 2000, 185.

remains a huge challenge in international environmental law.

2.3. Towards solutions for introducing the concept of ecological debt in international environmental law

Given the difficulties mentioned in the previous section, the introduction of the concept of ecological debt as such in international law will not be an easy task. However, here we would like to try to provide some materials and considerations that might be useful in this regard. This section consists of two parts. First of all, we focus on the already accumulated (historical) ecological debt. Secondly, we try to provide some legal means to prevent a further day-by-day build-up of the ecological debt.

2.3.1. Compensation for historical debt

A growing state practice?

In his elaborative work ‘The Guilt of Nations’, Prof. Elazar BARKAN argues that recent decades have witnessed a growing *state practice* to provide *restitution* for some historical injustices.⁹⁸ Besides *World War II* related examples such as the well-known German reparation to the Jews, the letter of formal apology and \$US 20 000 that was provided by the US government in the late 1980s to each Japanese-American held in interment camps⁹⁹ and the creation of a humanitarian fund in the 1990s by the Swiss government for Holocaust victims who lost their money in Swiss banks, other practices dealt with the consequences of *colonialism*. Among others, for instance, the long overdue acknowledgement of land rights for Aborigines in Australia, and Queen Elizabeth’s apologies to the Maori in New Zealand for “*acting unjustly*”.¹⁰⁰

More important still than thoroughly describing these cases in a comparative perspective, BARKAN notes that “*the demand that nations act morally and acknowledge their own gross*

⁹⁸ BARKAN, E. *The Guilt Of Nations: restitution and negotiating historical injustices*, Baltimore, John Hopkins University Press, 2000, 414 p. *Restitution* is used by the author to include the entire spectrum of attempts to rectify historical injustices and is thus not limited to the traditional legal meaning of the term as the return of the specific actual belongings that were confiscated or stolen.

⁹⁹ From Wire Reports, “Cost of slavery in court; Aetna, CSX sued for compensation”, March 27, 2002.

¹⁰⁰ In passing, it should be mentioned that victims of similar historical indignities have also tried to seek reparation from *private companies* in courts. *Apartheid* victims are currently suing banks and corporations that supplied critical support to the apartheid regime which ruled south Africa until 1994. The case includes multinational corporations like IBM, General Motors, Exxon Mobil, Ford Motor Company. IBM for example is charged for supplying technology for white south African authorities to create passbooks for the black population that were used to control their movement, employment and residence. There have also been attempts to seek *slavery* reparations from private companies. One of the problems is that the victims are modern-day descendants to the slaves, and are not directly harmed. The lawyer Ed Fagan, who succeeded in settling a series of Holocaust lawsuits, is suing a big insurance company for underwriting ships used to transport human cargo centuries ago. The victims will have to prove a link between themselves and the specific African tribes and will have to convince the court that the company should be punished even though they were not acting illegally at the time. There have been similar cases before but courts have dismissed them. See: SORR, R., and SHERWOOD, B., Lloyd’s faces class action for role in slave trade”, *The Financial Times*, 30 March 2004, 8; A. ERKUL, Nazaten slaven eisen schadevergoeding, *De Morgen*, 1 April 2004.

historical injustices is a new phenomenon".¹⁰¹ He states that there is a growing willingness of governments to admit that past policies were unjust and discriminatory and that terms for restitution or reparation should be negotiated with the victims of these policies. A willingness that moreover seems to be based more on moral considerations than on power politics.¹⁰² "*Restitution for historical injustices embodies the increasing importance of morality and the growing democratization of political life*".¹⁰³

The question for us of course is if the concept of ecological debt could one day become a part of this growing moral trend. Prof. BARKAN makes the general remark that restitution is being criticized by some as being inapplicable to contemporary disputes¹⁰⁴ and so with an ever-growing ecological debt, this seems to be a problem. But in fact a typical feature for most restitution cases was the ongoing presence and effect of the historical injustices in the daily lives of the victims, so in that sense the 'dispute' is never really 'finished' until restitution is commenced with. We have to start somewhere, and often the *recognition itself* of past injustices forms a good basis, in fact the actual core of restitution. For the cases BARKAN investigated, complete ("*commensurate*") monetary compensation for the injustices has almost never been attempted, most likely because of the potentially economically destabilizing effects this could have. But sometimes even a small monetary compensation can make a significant contribution and ameliorate the economic state of the victims of the injustices.¹⁰⁵ Also, the older the injustices, the harder it gets to imagine what the state of affairs would have been like if they had not been committed and further to use that historical reconstruction as a basis for restitution. Essential to restitution is that everything needs to be *negotiated*. Yet we must stay very alert to the criticism that where huge economic interests are at stake, perpetrators escape because they simply don't want to negotiate.¹⁰⁶ After all, we must not deny the fact that who we are is the result of our history, for better and for worse: "*we enjoy the riches of our past and therefore supposedly should pay our historical debts*".¹⁰⁷ At least a clear moral argument that, in our view, speaks in favour of the recognition of the historical ecological debt.

BARKAN also investigates why some victimized groups, so far, seem to be more successful than others in achieving restitution. Indigenous groups like Aborigines or Maoris for example, have been able to get recognition for the historical injustices they endured and even, at least to some extent, restitution of economic resources. In contrast, to this day, the African American descendants of slaves haven't succeeded in collecting reparations for slavery. A determining factor might be the ability of the group in question to come forward as a *unity* and as such present a claim. Another possible explanation is that the descendants of slaves are hesitant to start negotiations because they don't want to bargain away their 'identity' for a rather small sum of money, as anything beyond that now seems impossible to obtain. That fear, however, is not always reasonable: in certain restitution cases the sums that have been paid in the end are larger than the initial claims. This was the case with the restitution eventually provided by Germany after World War II and also in other cases, where negotiations are still in progress, the amounts under discussion continuously vary.¹⁰⁸

¹⁰¹ BARKAN, E. *o.c.*, XVI.

¹⁰² BARKAN, E. *o.c.*, 317.

¹⁰³ *Ibid.*, 308.

¹⁰⁴ *Ibid.*, 323.

¹⁰⁵ *Ibid.*, 323.

¹⁰⁶ *Ibid.*, 343.

¹⁰⁷ *Ibid.*, 344.

¹⁰⁸ *Ibid.*, 325-326.

In the end, much depends – again – on pure political will: “*Restitution is about choices.*”¹⁰⁹ Nevertheless, the conclusion of a certain *state practice* should bring some optimism and is important in international law, since in general it forms one of the necessary elements in establishing a rule of customary international law. Some even argue that ‘justice’ (in the sense of ‘fairness’) derives from state practice.¹¹⁰

Extensive interpretation of the principle of common but differentiated responsibilities

Another possible pathway to get the concept of historical ecological debt introduced in international law would be to apply a more extensive interpretation of the principle of common but differentiated responsibilities. As seen above (supra, 2.1.1.2. and 2.2.2.) this principle today indeed takes the acknowledgement of the larger share of industrialised countries in causing global environmental problems as its starting point, but then “does not look back” for further commitments. What should be done with the damage that has already been caused over the years – or the ecological debt that has already been accumulated? Apart from what is the case with the Adaptation Fund under the Kyoto Protocol, the principle of common but differentiated responsibilities has otherwise never been used on an international scale as a basis of *true remedial action* regarding environmental damage.

A litigation-based approach

Finally, we think that finding redress in an International Court for environmental damage that was (or is being) caused, might be an ultimate option. Especially for getting compensation for the consequences of climate change, this may be fruitful and should be considered, although it should be emphasized again that many difficulties (e.g. acceptance of jurisdiction) remain¹¹¹ (supra, 2.1.2.2.). In addition, the proceedings in the *Certain Phosphate Lands in Nauru Case* may also serve as a promising example, although a verdict was never pronounced (supra, 2.1.2.2.). At least the option of litigation should be subject to further research.

2.3.2. Preventing further accumulation of ecological debt

Human rights

A solution for the ongoing accumulation of ecological debt might be found in the human rights discourse.¹¹² Point of departure is an absolute view of *international environmental justice* as *human dignity*, or as the provision of the minimum goods and rights that are required to lead a decent life. Put differently, recognition of that right implies the protection

¹⁰⁹ *Ibid.*, 344.

¹¹⁰ BIERMANN, F., “Justice in the Greenhouse: Perspectives from International Law”, in TÓTH, F. (ed.), *Fair weather: equity concerns in climate change*, London, Earthscan, 1999, 161.

¹¹¹ STRAUSS, A.J., “The Legal Option: Suing the United States in International Forums for Global Warming Emissions”, 33 ELR, 2003, 10185-10191. Available at: <http://www.climatelaw.org/media/strauss.pdf>.

¹¹² SACHS, W., “Environment and Human Rights”, Wuppertal Papers, No. 137, November 2003, 40p. Available at <http://www.wupperinst.org/Publikationen/WP/WP137.pdf>

of *subsistence rights*. These contain what people need to be able to develop as human beings: clean air and consumable water, basic health provision, sufficient nourishment, clothing and housing. Civil and political rights mean little without the protection of these subsistence rights.¹¹³

As logical and acceptable as it may seem, this assumption has serious consequences. Because of the unconditional nature of human rights and the fact that survival has priority over achieving a better living standard, the realization of these fundamental rights must go before all other activities. “*Applied to ecological subsistence rights, this means that the right to a living must take precedence over the non-fundamental resource needs of other agents. Subsistence needs come before luxury needs*”, Wolfgang SACHS states.¹¹⁴ To bring this into practice, three major changes are required. First of all, enhancing the power of the poor through acknowledgement and strengthening of *local community rights over resources*. This would ensure a decent living for those directly dependent on access to nature for their livelihood and at the same time protect the environment. Secondly, the power of the ‘well-off’ should be limited, in the sense that there should at least be a guarantee that all *national and international regulations do not further deteriorate the situation of the already disadvantaged*.¹¹⁵ This would indeed be an enormous challenge as it would imply a revolutionary priority shift both in politics and economics. However, this would be the right thing to do if we actually agree that human rights stand higher than trading or even environmental rights. Finally, the more affluent societies (also in the South) need a lasting transition into *sustainable economies*. This is crucial for guaranteeing the rights of those depending on natural resources for their survival. In concrete terms, for the latter this would require a more efficiency-based agricultural production and use of fuel, all in the short term. In the long run however, we can’t escape the fact that the rich economies will drastically have to lower their demands for the earth’s natural resources. Only production and consumption patterns that don’t occupy the same environmental space as today, both in terms of extraction of resources and use of the earth’s regenerative forces, can provide an answer to the crisis. “*For the statistical fact that a minority of prosperous countries overburden the global environment is now becoming a palpable reality as it leads to the degradation of other societies*”.¹¹⁶

Common Heritage of Mankind and Common Concern of Mankind

Today, only the deep seabed¹¹⁷ and the moon¹¹⁸ are considered as a ‘*common heritage of mankind*’.¹¹⁹ This special regime implies that no State can claim exclusive sovereignty over

¹¹³ SACHS, W., *o.c.*, 30.

¹¹⁴ *Ibid.*, 33.

¹¹⁵ *Ibid.*, 33.

¹¹⁶ *Ibid.*, 35.

¹¹⁷ UNCLOS Part XI (1982) and Agreement relating to the implementation of Part XI of UNCLOS (1994). Unfortunately, the latter weakened the international regime following objections of industrialised countries against e.g. the mandatory technology transfer, the decision-making procedure within the Authority, production limitations etc.

¹¹⁸ Agreement Governing the Activities of States on the Moon and other Celestial Bodies (1979), 18 ILM 1434.

¹¹⁹ LAVRYSEN, L. & MAES, F., “Juridische grondslagen voor het (inter-)nationaal verdelen en gemeenschappelijk beheren”, in MAZIJN, B. (ed.), *Duurzame ontwikkeling: meervoudig bekeken*, Gent, Academia Press, 2000, 189.

the non-living natural resources of those areas, but moreover, that these resources should be used for the interest of mankind as a whole. For example, the International Seabed Area – which is the seabed, ocean floor and subsoil thereof, all beyond the limits of national jurisdiction – is managed by the International Seabed Authority which main duty is to make sure that the economic benefits of deep seabed mining are being shared on a non-discriminatory basis for the benefit of all mankind.

On the other hand, the problem of climate change, the protection of the ozone layer, the conservation of the planet's biological diversity and the protection of Antarctica are nowadays considered to be a '*common concern of mankind*'.¹²⁰ Basically, this concept encompasses the expression of the international community's concern over global environmental problems. The major differences with the 'common heritage' approach – which are sometimes overlooked – is that the former doesn't imply a (legal) international management regime and actually deals with sources of pollution and natural resources that currently do fall under national jurisdiction of States. Some authors however claim that to conserve our planet's ecosystems, the common concern approach might be as effective as the common heritage approach. In their view, the former implies that individual States "*may no longer rely upon their sovereignty when most states consider environmental problems as a common concern of humankind that requires effective environmental policies on a global scale*".¹²¹

It is true that sometimes these two concepts have been mixed up in literature, especially while pleading for an extension of the "*common heritage*" regime.¹²² A realistic extension of the latter is not obvious however, given its strict legal character. Some authors plead for a limited extension of the regime but in a changed format, through a partial revision of its features.¹²³ We mention the concept here as evidence that the international community at a certain point in time apparently could reach an agreement on sharing certain (mineral) resources – on which no successful claims by individual nations had been established. It seems that the beginning of a solution for the accumulation of the ecological debt will require a more difficult shift of abandoning certain sovereignty claims over natural resources in favour of, for instance, an international body, that would – as a strict minimum – prevent natural resources from being exhausted. The already existing concepts might then serve as an inspiration.

Intergenerational Equity

A final solution could possibly be found in the theory of intergenerational equity.¹²⁴ Based

¹²⁰ *Ibid.*, 190.

¹²¹ BIERMANN, F., "Justice in the Greenhouse: Perspectives from International Law", in TÓTH, F. (ed.), *Fair weather: equity concerns in climate change*, London, Earthscan, 1999, 168-169.

¹²² See for references: CLIQUET, A., *Natuurbehoud in het mariene en kustzonemilieu. Overzicht en analyse van de juridische mogelijkheden, met bijzondere aandacht voor het mariene en kustzonemilieu van België*, Ph.D thesis, Ghent University, 2000, 158.

¹²³ BASLAR, K., *The concept of the common heritage of mankind in international law*, The Hague, Nijhoff, 1998, 85, 314-317, 280.

¹²⁴ BROWN WEISS, E., *In fairness to future generations: international law, common patrimony and intergenerational equity*, Tokyo, The United Nations University, 1989, 385 p.; BROWN WEISS, E., "Our Rights and Obligations To Future Generations For The Environment", in *Agora: What Obligation Does Our Generation Owe To The Next? An Approach To Global Environmental Responsibility*, 84 *AJIL*, 1990, 198-207.; BROWN WEISS, E., "Intergenerational Equity: Toward an International Legal Framework", in CHOUCRI, N. (ed.), *Global accord: environmental challenges and international responses*, Cambridge, MIT press, 1993, 333-351.

upon philosophical and legal traditions, international law roots¹²⁵ and institutional foundations, Professor of Law Edith BROWN WEISS proposes that we, the human race, hold the natural environment of planet Earth in common with all members of our species: the past generations, the present generation, and future generations as well. As members of the current generation, we hold the Earth in a ‘planetary trust’ for future generations, which gives us certain rights, but imposes certain duties upon us as well. Indeed, as beneficiaries of the trust that was passed on to us by our ancestors, we can now use it and benefit from it, but we should not forget that in that case, future generations have rights as well. Their rights are integrally linked with our duties, in fact depend upon our fulfilment of the latter.

As current generation, we must ensure conservation of *options*, conservation of quality and conservation of access. The first principle means that we should preserve the natural resource base of the planet in a state that leaves our descendants with the possibility of choices in satisfying their needs and solving their problems. Conservation of *quality* implies that we should pass our planet on in no worse condition than that in which it was received. This does not mean that the environment should be mainly left untouched. This would not be possible for that matter, but rather that we should only trade-off environmental goods within a monitoring framework that encompasses certain quality standards. Finally, particularly relevant for the concept of ecological debt and this section of the report is the idea of conservation of *access*. Each generation should give its members an equitable or non-discriminatory right to the utilization of the planet’s natural resources for their own economic and social needs, as long as this does not prohibit the exercise of this right to access of other members of that same generation.¹²⁶ This equal right that each member of a generation has (or should have), derives exactly “*from the underlying equality which all generations have with each other in relation to their use of the natural system*”.¹²⁷ In other words, the intragenerational equity is an inherent part of the fulfilment of our intergenerational duties. In fact, the two should not be a cause of conflict, but are complementary instead.

It is clear that the concept of ecological debt fits rather well into this theory. A debt has been created because on the one hand, we are not fulfilling our duties of conservation of *access* (or fulfilment of intragenerational equity), and on the other hand it is obvious that we are currently violating our duties of conservation of *quality* and *options* towards our descendants.

Different *strategies for implementing* this theory of intergenerational equity are conceivable. Options include¹²⁸: representation of future generations in (administrative, judicial and market-place situated) decision-making processes by an office or other organ¹²⁹ which sole duty would be to make sure that the rights of future generations are being considered; intergenerational assessments of the long-term impacts of our deeds on our descendants, starting from their interests; the development and codification of as many intergenerational rights and obligations as possible, some in binding texts, others in non-binding legal

¹²⁵ E.g. the Preamble to the Universal Declaration of Human Rights (1948) states: “*Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world...*” According to BROWN WEISS, this reference to all members of the human family, brings all generations in perspective as well.

¹²⁶ BROWN WEISS, E., “Intergenerational Equity: Toward an International Legal Framework”, in CHOUCRI, N. (ed.), *Global accord: environmental challenges and international responses*, Cambridge, MIT press, 1993, 343.

¹²⁷ *Ibid.*, 336.

¹²⁸ BROWN WEISS, E., *In fairness to future generations: international law, common patrimony and intergenerational equity*, Tokyo, The United Nations University, 1989, 119-152.

¹²⁹ One could also think of ombudsmen or commissioners acting at different (from international to local) levels.

instruments; the development, through learning and participation, of a global consciousness about the need to conserve the planet; the further sustainable use of renewable resources... Succeeding in completing any of these implementation strategies will, however, not be easy, since most political systems and private companies are inherently short-term orientated. “Achieving it will require adjustments in institutions, economic incentives, legal instruments, public consciousness and political will”.¹³⁰

2.4. Conclusions

The question of integration of ecological debt in international (environmental) law is a very interesting, but highly complicated subject. The main conclusions for this module¹³¹ - at this point in time – are that there is at least no clear legal *obligation* in MEAs to support the concept of ecological debt as such and that there is no clear support for that concept in international case law today. However, indeed several *links* or *materials* were found that cannot be ignored just like and that moreover indicate that the concept has a future, at least in pointing out certain essential problems. For the moment, the principle of common but differentiated responsibilities seems to be the most suitable principle to develop a legal basis for the concept. The principle is however not a legal principle and it is unclear if the principle is suitable for remedying historical ecological debt.

¹³⁰ BROWN WEISS, E., “Intergenerational Equity: Toward an International Legal Framework”, in CHOUCRI, N. (ed.), *Global accord: environmental challenges and international responses*, Cambridge, MIT press, 1993, 351.

¹³¹ For policy implications and final conclusions, see Part 5 of this report.

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